
HUMAN FACTORS QMB INVESTIGATION OF CFIT MISHAPS AND POSSIBLE INTERVENTIONS

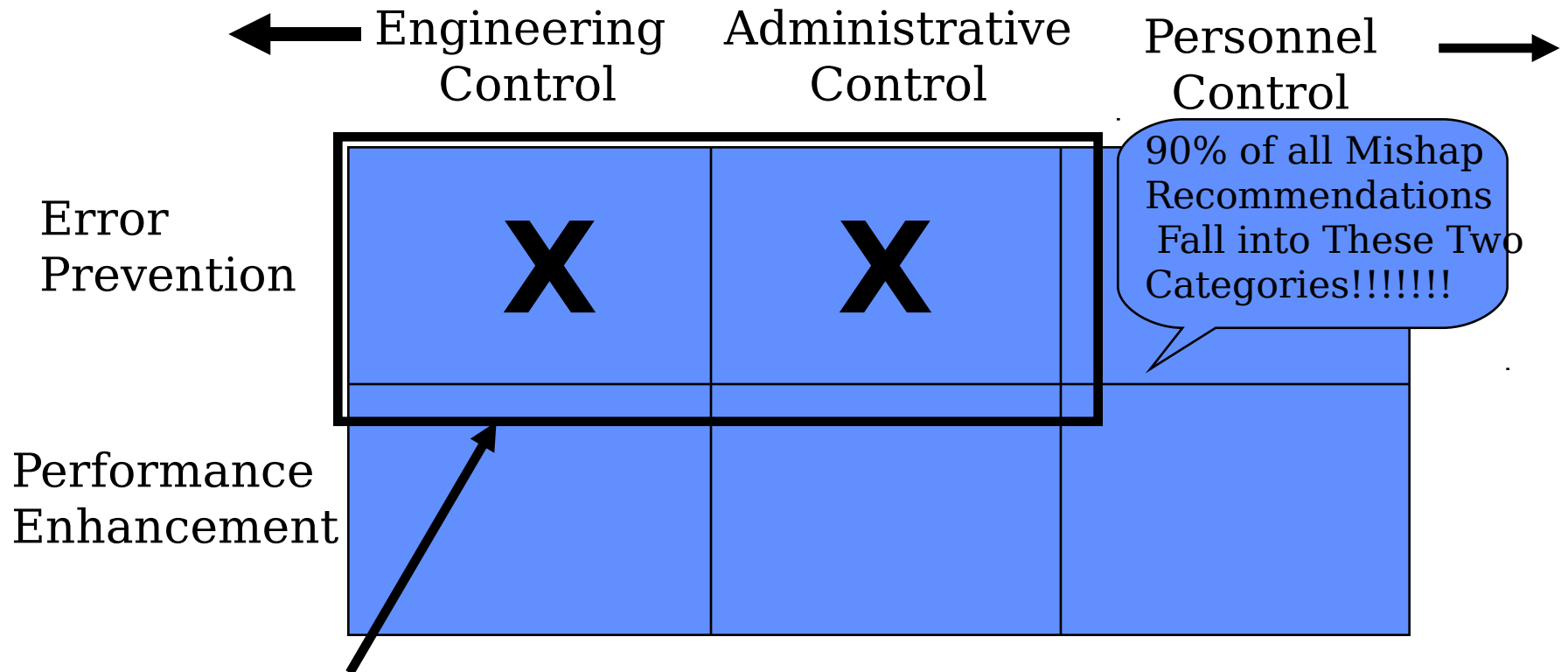
OVERVIEW

- 47 OUT OF 347 CLASS A MISHAPS SINCE FY90 INVOLVED CFIT!
- CFIT WORKING GROUP FORMED TO INVESTIGATE POSSIBLE CFIT INTERVENTIONS
- SAFETY CENTER PROVIDED RELATED MISHAP DATA
- FLEET OPERATORS QUERIED FOR INPUT
- QMB EXAMINED DATA AND FLEET RESPONSE, BRAINSTORMED IDEAS, SET INITIAL COURSE OF ACTION

INPUT FROM THE SAFETY CENTER

- 14% OF OF USN/USMC MISHAPS SINCE 1990 INVOLVED CFIT
- 22% OF HUMAN FACTORS RELATED MISHAPS INVOLVED CFIT
- LATENT CAUSAL FACTORS OF CFIT MISHAPS
 - LESS THAN ADEQUATE ENGINEERING
 - LESS THAN ADEQUATE SUPERVISION
 - LESS THAN ADEQUATE PERSONNEL CONDITIONS

INPUT FROM SAFETY CENTER



“We Need to Start Thinking Out of the Box”

STRIKE A/C AND HELO CFIT ENVIRONMENT & TIME COMPARISON

Strike CFIT Distribution

	DAY	NIGHT
ASHORE	46%	16%
EMBARKED	0%	38%

(n=24)

HELO CFIT Distribution

	DAY	NIGHT
ASHORE	25%	25%
EMBARKED	6%	44%

(n=16)

INPUT FROM FLEET OPERATORS

- RESPONSES ADDRESSED MULTIPLE ISSUES IN THREE GENERAL CATEGORIES
 - HARDWARE/SOFTWARE
 - SUPERVISION/REGULATION
 - TRAINING
- THESE CORRESPOND TO THE LATENT CASUAL FACTOR GROUPS NOTED BY SAFETY CENTER EARLIER

HARDWARE/SOFTWARE

- SIGNIFICANT FLEET RESPONSE CONCERNING THE PRIORITY, FUNDING, DEVELOPMENT AND FIELDING OF TECHNOLOGIES THAT MIGHT COMBAT CFIT
- **LEADERSHIP MUST SUPPORT THE INCREASED PRIORITY OF COUNTER CFIT TECHNOLOGIES IN THE PROCUREMENT PROCESS**

SUPERVISION / REGULATION

- **REQUIRED OPERATIONAL CAPABILITIES**
 - WHAT ARE THEY, WHAT IS THE ENVIRONMENT IN WHICH THEY ARE TO BE PERFORMED
- **LAT TRAINING RULES IN OPNAV-3710**
 - CURRENCY (HIGH TO LOW MIND SET)
 - MANDATORY BRIEFING ITEMS
- **TYPEWING CORE SOPs**
 - CURRENCY, BRIEFING ITEMS, AIRCREW CHECKLISTS AND RESPONSIBILITIES, ALT LIMITATIONS
 - COMMUNITY SPECIFIC RADALT PROCEDURES

TRAINING

- INCORPORATION OF RADALT DISCIPLINE IN THE EARLIEST STAGES OF TRAINING COMMAND
- STANDARDIZE POST FRS TRAINING FOR INDIVIDUAL COMMUNITIES
 - (SFTI PROGRAM)
- AEROMEDICAL TRAINING
 - MORE FREQUENT
 - G-AWARENESS (CENTRIFUGE)
 - SPATIAL DISORIENTATION

TRAINING

- EXAMINE INSTRUMENT GROUND SCHOOL AND CHECK FLIGHT PROCESS
 - FLEET WIDE, TYPE A/C
 - SCOPE
 - EXTERNAL CHECK RIDES
 - INCORPORATION OF ACT

TRAINING

- MAXIMUM USE OF SIMULATORS
 - BASIC INSTRUMENT FLYING
 - RADALT AND GPWS DOCTRINE
 - HIGH TASK LOAD DURING TAKE-OFF AND APPROACH
 - AIRCREW COORDINATION TRAINING
 - CHECK LIST
 - CREW RESPONSIBILITIES AND CROSS SCAN
 - COCKPIT RESOURCE MANAGEMENT TRAINING
- DEDICATED LAT TRAINING
 - MORE? / NONE? (IS IT A REQUIREMENT?)

WHAT'S NEXT

- OPERATIONAL RISK MANAGEMENT
- OPERATIONAL REQUIREMENTS
- ENVIRONMENT IN WHICH WE NEED TO PERFORM
- TRAINING REQUIREMENTS TO BE CURRENT / PROFICIENT